

In The Specification:

Please add paragraph the following new paragraph before paragraph [0001]:

[0001.1] This is a Continuation of United States Patent Application Serial No. 10/011,806 filed on December 3, 2001.

Please replace paragraph [0002] with the following amended paragraph:

[0002] The most frequent type of plunging joints are so-called VL joints (cross-groove joints) such as according to ~~DE 31 02 871 C2~~ U.S. Patent No. 4,678,453 wherein the center lines of the outer tracks and of the inner tracks each form oppositely directed angles of intersection with the longitudinal joint axis and are positioned in planes extending parallel to the longitudinal joint axis or on a cylindrical face around the longitudinal joint axis.

Please replace paragraph [0007] with the following amended paragraph:

[0007] In one form of the displacement path, the joint in accordance with the invention provides a way to uncouple axial vibrations and thus contributes towards improving the noise, vibration, harshness (NVH) behavior. The present design is also advantageous in that it is possible to un-fine the surfaces during the machining operations. Also, the design of the tracks provides a joint with axial ~~centering~~ centering characteristics.

Please replace paragraph [0009] with the following amended paragraph:

[0009] By limiting the axial displacement path, it is ensured that the control angles do not become too small as a result of the axial displacement. The stops for delimiting the axial plunging path can become effective exclusively between the outer joint part and the cage, or exclusively between the inner joint part and the cage, or between both pairs simultaneously; in each case when the joint is in the aligned position, in which case the longitudinal axes of the inner joint part and of the outer joint part coincide. As the ball cage is radially set free relative to the inner joint part and to the outer joint part, the joint is characterised by particularly low friction. Furthermore, because of the counter-track formation, it is ensured that the joint is axially ~~self-centering~~ self-centering and that the forces acting on the cage are kept within certain limits. In addition, the way in which the balls are enveloped by the tracks in a cross-sectional view is particularly advantageous.

Please replace paragraph [0032] with the following amended paragraph:

[0032] Figure 5b shows part of a modified inventive joint similar to that illustrated in Figure 4b. Identical parts have been given identical reference numbers, but are identified by the index 5. As a result of modified radii, only one circumferential edge 25₅ of the outer joint part 12₅ touches the outer face 21₅ of the ball cage 17₅, whereas in this axial stopping position, the inner face 23₅ of the ball cage 17₅ still has radial play relative to the outer face [[23₅]] 24₅ of the inner joint part 14₅. An outer edge 27₅ of the ball cage forms a corresponding stop, with the displacement path of the same size extending in the opposite direction. An angle α at the ball cage 17₅ is the angle between the displaced central plane and a radius through the contacting edge.

Please replace paragraph [0036] with the following amended paragraph:

[0036] Figure 8 shows a joint 11₈ which is similar to that shown in Figure 1, but differs substantially in certain details. The details which correspond to one another have been given the same reference numbers. To that extent, reference is made to the description above. In particular, reference is made to the illustrated outer tracks 19₁ and inner tracks 20₁ as well as to the outer tracks 19₂ and inner tracks 20₂ which are not shown in Figure 8, for simplification. The details which deviate from Figure 1 have been given the index 8 and will be referred to below. With the joint of Figure 8, the spherical outer face 21₈ of the ball cage 17₈ is radially centered in the spherical cylindrical inner face 22₈ of the outer joint part 12₈. Furthermore, the inner face 23₈ of the ball cage 17₈ is arranged at a radial distance from the spherical outer face 24₈ of the inner joint part 14₈. As a result, there is achieved, as will be explained in greater detail below, a relative axial displaceability between the outer joint part 12₈ and the inner joint part 14₈, with the ball cage 17₈ setting itself to half the displacement path.

Please replace paragraph [0042] with the following amended paragraph:

[0042] Figure 12, in a simplified illustration without the cage, shows the outer joint part 12, the inner joint part 14 and the balls 16 which carry the same reference numbers as used in Figure 1. In all three illustrations, the central plane defined by the ball centers is referred to as the central joint plane E, i.e., a new artificial reference plane is not introduced. The tracks 19, 20 are referred to by their track base lines and their track center lines 9, 10 only. For the sake of simplicity, the track edges have also been eliminated. The position of the balls is defined by the points of intersection of the track center lines 9, 10. As a result of the relative displacement V_{\max} between the outer joint part and the inner joint part, the centers of curvature of the track center lines 9, 10 are displaced relative to one another, as a result of which the control angles between the

associated track center lines 9, 10 simultaneously change in opposite senses, i.e. the one increases, the other decreases. The minimum distance of the centers of curvature from the central joint plane E is referred to as Q_{\min} and the maximum distance of the centers of curvature from the central joint plane E is referred to as Q_{\max} . The angles between the radii positioned perpendicularly on the tangents in the points of intersection of the track center lines correspond to the control angles β_1, β_2 between said track center lines. Each half of said angles between the radii is referred to as $\beta_{\max}/2, \beta_{\min}/2$. The axial displacement is to be delimited to such an extent that $\beta_{\min}/2$ is not less than 4° and that the smallest control angle β_{\min} thus is not less than 8° . In the Figures, reference letter M represents the center of curvature for the respective ball tracks having the corresponding number. Thus, for example, M9₂ is the center of curvature of the center lines of the second inner ball tracks 9₂.

Please replace paragraph [0044] with the following amended paragraph:

[0044] ~~The invention relates to a~~ A constant velocity ball joint in the form of a counter track joint, ~~comprising having~~ having an outer joint part ~~with outer tracks~~, an inner joint part ~~with inner tracks~~, torque transmitting balls received in pairs of tracks formed of outer tracks and inner tracks ~~which are outwardly curved with reference to the longitudinal joint axis~~, and a ball cage ~~with cage windows in which the balls are held in a common plane and guided on to the angle bisecting plane when the joint is articulated. First outer tracks, together with first inner tracks, form first~~ First pairs of tracks whose first control angles open in a first axial direction ~~and in which~~ hold first balls are held. ~~Second outer tracks, together with second inner tracks, form second~~ Second pairs of tracks whose control angles open in a second axial direction ~~and in which~~ hold second balls. ~~are held, with the~~ The control angles ~~being~~ are defined as angles between the tangents at the ball contact points in the pairs of tracks. The outer joint part and the inner joint part are axially displaceable relative to one another. The first control angle and the second control angle change in opposite senses when a relative axial displacement occurs. The axial displacement path is limited to observing a minimum value of at least 8° for the respective smaller control angle.